

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

THE APPLICATION OF ESTILL COUNTY)	
WATER DISTRICT NO. 1, OF ESTILL)	
COUNTY, KENTUCKY, FOR (1) A CER-)	
TIFICATE OF PUBLIC CONVENIENCE)	
AND NECESSITY, AUTHORIZING AND)	
PERMITTING SAID WATER DISTRICT)	
TO CONSTRUCT A WATERWORKS CON-)	
STRUCTION PROJECT, CONSISTING)	CASE NO. 9018
OF EXTENSIONS, ADDITIONS, AND)	
IMPROVEMENTS TO THE EXISTING)	
WATERWORKS SYSTEM OF THE)	
DISTRICT; (2) APPROVAL OF THE)	
PROPOSED PLAN OF FINANCING OF)	
SAID PROJECT; AND (3) APPROVAL)	
OF THE INCREASED WATER RATES)	
PROPOSED TO BE CHARGED BY THE)	
DISTRICT TO CUSTOMERS OF THE)	
DISTRICT)	

O R D E R

The Estill County Water District ("Estill County") filed an application on March 28, 1984, for approval of adjustments to its water service rates, authorization to construct a \$656,000 waterworks improvements project, and approval of its financing for the proposed project. Estill County's financing includes \$11,000 from applicants for service in the proposed project area, a loan of \$256,000 from the Farmers Home Administration ("FmHA") at 7 3/8 percent interest, and a grant of \$389,000 from the FmHA. Estill County will issue waterworks revenue bonds as security for the FmHA loans. The repayment period for the loan will be 40 years. The proposed improvements will extend service to about 67

additional customers. Plans and specifications for these improvements as prepared by Parrott, Ely and Hurt Engineers, Inc., of Lexington, Kentucky, ("Engineer") have been approved by the Division of Water of the Natural Resources and Environmental Protection Cabinet.

The increased rates proposed by Estill County would provide revenues from existing and proposed additional customers of \$324,367, an increase of \$26,616 over normalized revenues from existing and proposed customers. The Commission in this Order has determined Estill County's revenues from existing rates to be adequate and no increase is required.

A hearing was held in the offices of the Public Service Commission, Frankfort, Kentucky, on September 5, 1984. There were no intervenors, and no protests were entered.

TEST PERIOD

Estill County has proposed and the Commission has accepted the 12-month period ended December 31, 1983, as the test period in this case.

REVENUES AND EXPENSES

Estill County had a net operating loss of \$14,985 for the test period. In order to reflect normal operating conditions subsequent to completion of the proposed construction, Estill County proposed several adjustments to test period revenues and expenses. The Commission finds Estill County's adjustments to be proper and accepts them with the following exceptions:

Operating Revenues

Estill County had test period water sales revenue of \$232,594. Estill County proposed and the Commission has accepted adjustments to normalize test period revenue to reflect 33 additional customers served at the end of the test period and 65 additional customers to be served by the proposed construction. In addition, the Commission has normalized the proposed revenues to reflect the Commission's Order in Case No. 7335-1, Purchased Water Adjustment of Estill County Water District No. 1, as the revenues generated by these new rates were only realized for 1 month in the test period.¹ Therefore, the Commission has determined Estill County's annualized revenue from water sales to 1,284 existing and 65 new customers to be \$292,796, and accordingly has adjusted operating revenues by \$60,202.²

Purchased Water

Estill County's test period expense for purchased water was \$101,122 and it proposed to increase this amount by \$11,516 to reflect increased usage from additional customers. In proposing the increase, Estill County estimated that 56 customers would be added through natural system growth. However, only 33 additional customers were on-line at the end of the test period. The Commission is of the opinion that the 33 additional customers represent a known and measurable increase to test period results.

¹ Exhibit 11, 2(c), filed June 5, 1984.

² Annualized Water Sales
Test Period Water Sales
Revenue Adjustment

\$292,796
<u>232,594</u>
<u>\$ 60,202</u>

Accordingly, the Commission has made an allowance for such increased usage in determining Estill County's allowable purchased water expense.

Estill County's water loss for the test period was 15.8 percent. It is the Commission's policy to allow a maximum of 15 percent water loss for rate-making purposes. In adhering to that policy the Commission has determined Estill County's allowable purchased water expense by first calculating allowable gallons and then using Estill County's contract rate for purchased water. Therefore, the Commission has found \$113,273³ to be the appropriate purchased water expense and has adjusted Estill County's pro forma purchased water expense by \$635.⁴

Professional Fees

Estill County paid \$23,621 during the test period for professional services. Exhibit O of Estill County's application indicated that approximately 90 percent of that figure, or \$21,221, was incurred for engineering services. At the Commission's request Estill County provided a breakdown listing the projects for which engineering work had been provided and the costs associated with each project.

³	Allowable gallons - existing customers (000)	81,517,384
	Allowable gallons - proposed customers (000)	4,367,059
	Allowable gallons - other accounted for water (000)	11,764,706
	Total allowable gallons (000)	97,649,149
	X Contract price/000 gallons	\$.00116
	Allowable expense - purchased water	\$ 113,273
⁴	Allowable Expense	\$113,273
	Pro forma Expense	112,638
	Purchased Water Adjustment	\$ 635

The Phase III Water Project, the waterworks improvement project proposed in this proceeding, accounted for \$9,915 of the total engineering fees. The Commission is of the opinion that this expenditure should have been capitalized and subsequently included in the total cost of the Phase III Water Project.

Estill County paid approximately \$11,509 for various sewer studies during the test period. Information filed pursuant to the Commission's Order of May 4, 1984, revealed that these studies were "for Innovative and Alternative Waste Collection and Treatment."⁵ Since these studies cannot be directly associated with the normal operations of Estill County's water system, the Commission must disallow, for rate-making purposes, the cost of such surveys. Therefore, the Commission has adjusted Estill County's test period professional fees by \$21,200⁶ after allowing depreciation expense for the appropriate capital item.

Depreciation Expense

Estill County had test period depreciation expense of \$45,063 and proposed an increase of \$13,364 to reflect depreciation on total plant after completion of the proposed construction. It is the Commission's policy that depreciation expense be computed on the basis of original cost of the plant in service less contributions in aid of construction, as a utility

⁵ Exhibit 4 A(1) of Estill County response filed June 5, 1984.

⁶

Phase III Water Project	\$ 9,915
Less: Depreciation (\$9,915 X 2.26% proposed rate)	224
Phase III Adjustment	\$ 9,691
Sewer Projects Adjustment	11,509
Net Adjustment - Professional Fees	\$21,200

should not be allowed recovery on that portion of plant which has been provided at zero cost.

Estill County's composite depreciation rate for plant in service during the test period was 3.1 percent.⁷ According to the balance sheet filed in Estill County's original application, the level of contributions in aid of construction was \$671,874, or approximately 46 percent of the existing plant. Based on this information, the Commission has determined the allowable depreciation expense for existing plant to be \$24,474.⁸

The composite depreciation rate proposed by Estill County for its proposed plant in the amount of \$656,000 was 2.26 percent.⁹ The Commission has determined that the allowable annual depreciation expense for the proposed plant after adjusting for contributions of \$400,000 applicable to the proposed plant is \$5,786.¹⁰ Therefore, the Commission has adjusted Estill County's test period depreciation expense by

⁷ Test period depreciation (\$45,063) ÷ Gross Plant less Land (\$1,453,999) = 3.1%.

⁸

Gross Plant	\$1,461,347
Less: Contributions in Aid of Construction	671,874
Non-Contributed Plant	<u>\$ 789,473</u>
X Composite Depreciation Rate	3.1%
Allowable Depreciation - Existing Plant	<u>\$ 24,474</u>

⁹ Proposed yearly expense (\$14,849) ÷ Total Construction (\$656,000) = 2.26%.

¹⁰

Estimated Construction	\$656,000
Estimated Contributions in Aid of Construction	400,000
Non-Contributed Plant	<u>\$256,000</u>
X Proposed Composite Rate	2.26%
Allowable Depreciation - Proposed Plant	<u>\$ 5,786</u>

\$14,803 to reflect allowable depreciation expense on existing and proposed plant of \$30,260.¹¹

Rate Case Expense

Estill County proposed to include in test period expenses various costs totalling \$6,420 which were incurred in presenting its rate case to the Commission. It is the policy of the Commission to amortize such expenses over a 3-year period. Thus, the Commission accepts \$2,140¹² as the appropriate expense in this matter.

Therefore, Estill County's test period operations have been adjusted as follows:

	<u>Per Books</u>	<u>Adjustments</u>	<u>Adjusted</u>
Operating Revenues	\$245,491	\$ 60,202	\$305,693
Operating Expenses	<u>260,476</u>	\$ <17,440>	<u>243,036</u>
Net Operating Income	<u>\$<14,985></u>	<u>\$ 77,642</u>	<u>\$ 62,657</u>

REVENUE REQUIREMENTS

Estill County's annual debt service based on debt outstanding during the test period and on the financing proposed and

¹¹	Test Period Depreciation	\$45,063
	Less: Allowable Depreciation - Existing Plant	\$24,474
	Allowable Depreciation - Proposed Plant	<u>5,786</u>
	Net Depreciation Adjustment	<u>\$14,803</u>
¹²	Total Rate Case Cost	\$6,420
	Less: Allowable Expense (\$6,420 ÷ 3 years)	<u>2,140</u>
	Adjustment to Rate Case Expense	<u>\$4,280</u>

approved in this proceeding is \$56,180.¹³ Estill County's adjusted net operating income of \$62,657 plus interest income from water operations of \$8,534 provides a debt service coverage ("DSC") of 1.27X.¹⁴ The Commission is of the opinion that a DSC of 1.2X is the fair, just and reasonable coverage necessary for Estill County to pay its operating expenses and to meet the requirements of its bondholders. Accordingly, the Commission has determined the current rates charged by Estill County are adequate to ensure its financial stability.

RATE DESIGN

Billing Analysis

In preparing its billing analysis, Estill County included approximately 56 customers with average usage of 4500 gallons which it estimated to be the average annual growth potential for the existing system. Estill County further stated that only 33 of these are now actually on line.¹⁵ The Commission is of the opinion that the billing analysis was over-estimated and accordingly, only those customers who are actually on line should be considered for rate-making purposes. Therefore, the billing

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<u>Bond</u>	<u>Amount</u>	<u>Amortization Factor</u>	<u>Debt Service</u>
1964	\$270,000	.05828	\$15,736
1976	350,000	.05828	20,398
1984(85)	256,000	.078305	<u>20,046</u>

Total Debt Service

\$56,180

¹⁴ $\$62,657 + \$8,534 = \$71,191 \div \$56,180 = 1.27.$

¹⁵ Attachment to Exhibit 0 of the Application.

analysis revenue has been reduced by \$4,957 to remove estimated revenue associated with excess growth projections.

Estill County also included in its billing analysis 67 new customers with average usage of 3500 gallons per month. These customers have signed agreements for water service and will be added as a result of the new construction. In addition to these, a school and a church camp have been added since the end of the test year with estimated annual usage of 38,834 and 50,000 gallons per month, respectively. The school and church camp were not included in the billing analysis. The Commission is of the opinion that these customers should be considered for rate-making purposes and has adjusted the billing analysis to reflect the additional usage for the school and church camp.

After making the above-mentioned adjustments, the billing analysis shows Estill County's annualized revenue at current rates to be \$292,796.

Minimum Bills

The church camp will be served through a 2-inch meter and the school will be served through a 1-inch meter.¹⁶ The Commission is of the opinion that minimum usage levels and bills should be established which will be more reflective of the capacity and expense associated with larger meters.

Tap Fees

Estill County proposed to increase its tap fee from \$250 to \$350 and filed cost data justifying the increased costs. The

¹⁶ Letter to Richard Heman from Bob Blankenship dated April 23, 1984.

Commission is of the opinion the proposed tap fee is reasonable and should be approved.

FINDINGS AND ORDERS

The Commission, after consideration of the application and evidence of record and being advised, is of the opinion and finds that:

1. Public convenience and necessity require that the construction proposed in the application and record be performed and that a certificate of public convenience and necessity be granted.

2. The proposed improvements to the Estill County water system include a new 197,000-gallon water storage tank, 67 residential service connections, about 6.75 miles of 8-, 6- and 4-inch water main and miscellaneous appurtenances.

3. The low bids received for the proposed improvements totaled \$366,976 which will require about \$656,000 in project funding after allowances are made for fees, contingencies, other indirect costs, and additional construction being considered as a result of receiving bids under the final estimates.

4. Estill County should obtain approval from the Commission prior to performing any additional construction not expressly certificated by this Order.

5. Any deviations from the construction herein approved which could adversely affect service to any customer should be subject to the prior approval of this Commission.

6. Estill County should file with the Commission duly verified documentation which shows the total costs of

construction including all capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed.

7. Estill County's contract with its Engineer should require the provision of full-time resident inspection under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering. The supervision and inspection should insure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.

8. Estill County should require the Engineer to furnish a copy of the record plans and a signed statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the date of substantial completion of this construction.

9. A 5/8-inch x 3/4-inch meter should be the standard customer service meter for all new customers and should be installed at all points of service unless the customer provides sufficient justification for the installation of a larger meter.

10. Estill County should file with the Commission a copy of all contractual agreements for the provision of services or the purchase of services which are subject to the approval of this Commission.

11. The proposed borrowing of \$256,000 is for lawful objects within the corporate purposes of Estill County, is necessary and appropriate for and consistent with the proper

performance of services to the public by Estill County, and will not impair its ability to perform these services.

12. The financing secured by Estill County for this project will be needed to pay for the work herein approved. Estill County's financing plan should, therefore, be approved.

13. The construction costs should be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for Water Utilities prescribed by this Commission.

14. The rates and charges proposed by Estill County will produce revenues in excess of those found reasonable herein and should be denied upon application of KRS 278:030.

15. The tap fee proposed by Estill County is reasonable and should be approved.

16. Minimum usage and bills for 1- and 2-inch meters should reflect the capacity and expense of said meters.

17. The existing rates and charges are the fair, just and reasonable rates to be charged by Estill County in that they will produce the revenue necessary for Estill County to pay its operating expenses and meet its bonded indebtedness.

IT IS THEREFORE ORDERED that Estill County be and it hereby is granted a certificate of public convenience and necessity to proceed with the waterworks improvements projects set forth in the plans and specifications of record hereby approved.

IT IS FURTHER ORDERED that Estill County shall comply with all matters set out in Findings 4 through 10 as if the same were individually so ordered.

IT IS FURTHER ORDERED that the financing plan proposed by Estill County be and it hereby is approved.

IT IS FURTHER ORDERED that the construction costs and all overheads shall be classified in accordance with the Uniform System of Accounts for Water Utilities prescribed by this Commission and shall be filed within 30 days of completion of construction.

IT IS FURTHER ORDERED that the rates and charges proposed by Estill County be and they hereby are denied.

IT IS FURTHER ORDERED that the tap fee proposed by Estill County and in Appendix A be and it hereby is approved.

IT IS FURTHER ORDERED that Estill County shall establish minimum usage and bills for 1- and 2-inch meters as shown in Appendix A.

IT IS FURTHER ORDERED that the existing rates and charges of Estill County shall remain in full force and effect with the exception of those charges in Appendix A.

IT IS FURTHER ORDERED that Estill County shall file with the Commission within 30 days of the date of this Order its revised tariff sheets setting forth the charges approved herein.

Nothing contained herein shall be deemed a warranty of the Commonwealth of Kentucky, or any agency thereof, of the financing herein authorized.

Done at Frankfort, Kentucky, this 12th day of October, 1984.

PUBLIC SERVICE COMMISSION

Richard D. Ibramph
Chairman

[Signature]
Vice Chairman

[Signature]
Commissioner

ATTEST:

Secretary

**APPENDIX TO AN ORDER OF THE PUBLIC SERVICE
COMMISSION IN CASE NO. 9018 DATED October 12, 1984.**

Minimum Bills

TAP FEE	\$350
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